

WHAT IS CLAIMED IS:

1. A router sub-base comprising:

5 a pad of material having an upper face and a lower face, and an edge, the pad upper and lower faces are substantially flat and smooth, the pad upper face is substantially parallel to the pad lower surface, the pad edge is substantially perpendicular to the pad upper and lower faces,

10 the pad is of substantially uniform thickness, and large enough to cover substantially the entire lower surface of a router base to which the pad may be attached, and

15 means for attaching the pad to the router base.

2. The router sub-base of claim 1 in which the edge of the pad presents a substantially flat, substantially vertical surface toward a router collet when the sub-base is attached to the router base, and the router is placed on a horizontal surface.

3. The router sub-base of claim 2, further comprising a channel formed in the lower face of the pad.

25 4. The router sub-base of claim 3, in which the channel is deep enough and wide enough to allow projections cut by a cutting bit engaged in a collet of the router to slide through the channel without restricting movement of the pad.

30 5. The router sub-base of claim 4 in which the router is an offset router.

35 6. The router sub-base of claim 5, in which the thickness of the pad is sufficient to position a distal end of a router bit secured to the router collet to reside approximately ten one-thousandths of an inch from a flat surface when the offset router to which the pad is attached is placed on the flat surface.

40 7. The router sub-base of claim 6, in which the pad is approximately eight tenths of one inch thick.

8. A method of cutting a plug or other projection, comprising the steps of:
 attaching the sub-base of the present invention to a router using
 suitable means,

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- attaching a suitable cutting bit to the collet of the router,
- setting the router on a flat surface having the ends of plugs or other projections extending therefrom,
- 5 adjusting the cutting bit of the router,
- turning on the router,
- 10 moving the router across the flat surface, keeping the bottom of the sub-base against the flat surface, so that the cutting bit of the router moves to, and cuts through, the projecting end of the plug or other projection.
- 15 9. The method of cutting a plug or other projection of claim 8, further comprising the step of moving the main part of the router over the end of the cut plug or other projection, so that the remaining end of the plug or other projection extending from the flat surface after the plug or projection is cut moves through a channel formed in the lower surface of the sub-base.
- 20 10. A method for creating custom wooden pieces for special applications, comprising the steps of:
- 25 attaching the sub-base of the present invention to an offset router using suitable means,
- attaching a suitable cutting bit to the collet of the offset router,
- 30 setting the offset router on a flat surface of a workpiece,
- adjusting the cutting bit of the offset router using the so that the distal end of the cutting bit is approximately equal to the lower surface of the sub-base,
- 35 turning on the router,
- moving the router freehand so that the bit moves, side to side and generally forward in a series of arcs, to and through a portion of the workpiece at or near the edge of the flat surface of the workpiece, using the flat surface as a guide.
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